

Claims

1. A method of controlling rate of oxygen transfer from the atmosphere into a
5 liquid comprising,
storing the liquid in a closed container having walls exposed to the
atmosphere at atmospheric pressure,
wherein the container is self supporting and the walls of the container
comprise a rigid plastics material which allows oxygen to permeate the walls directly
10 from the atmosphere into the liquid in contact with the walls at a rate of 13mg to
65mg of atmospheric oxygen per square metre of the wall area for each 1 millimetre
of the walls thickness per 24 hour period at room temperature.
2. A method according to claim 1 wherein the liquid comprises wine.
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3. A method according to claim 1 wherein the level of the liquid surface in the
container creates a head space in the container and the liquid surface is separated
from the head space by a barrier member floating on the liquid surface, the barrier
member having a peripheral portion which is in sliding contact with the container
20 walls so as to separate the liquid surface from the head space.
4. A method according to claim 3 wherein the liquid comprises wine, and the
ratio of contained volume of wine to surface area of the walls of the container falls
within the range 5 to 30 litres per square metre of surface for each 1mm of thickness
25 of the walls.
5. A method according to claim 4 wherein the wine is stored in the container for
a period ranging between 4 months and 36 months and the total rate of oxygen
transmission into the wine is less than 55mg/litre of wine/year.
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6. A method according to claim 5 wherein oak staves are suspended in the wine
during the storage period.

7. A container assembly for controlling rate of oxygen transfer from the atmosphere into a liquid stored in the container assembly comprising,
a container with impermeable walls, and
a barrier member which provides a permeable barrier to control oxygen access
5 from the head space in the container to a surface of the liquid, the barrier member having a construction which causes it to float on the liquid surface, with its edge in close proximity to the walls of the container, to substantially separate the liquid surface from the head space.
- 10 8. A method according to claim 7 comprising a peripheral flange surrounding the barrier member arranged so that it makes slidable peripheral contact with the walls of the container.
9. A container assembly for controlling rate of oxygen transfer from the
15 atmosphere into a liquid stored in the container assembly comprising,
a container with walls having an oxygen permeability of 13mg to 65mg of oxygen per square metre of area of walls of the container for each millimeter of the thickness of the walls per 24 hour period at room temperature, and
a barrier member for providing a barrier to limit oxygen access from head
20 space in the container to a surface of the liquid the barrier member having a construction which causes it to float on the liquid surface, with its edge in close proximity to the walls of the container to substantially separate the liquid surface from the head space.
- 25 10. A method according to claim 9 comprising a peripheral flange surrounding the ~~barrier member arranged so that it makes a slidable peripheral contact with the walls~~ of the container.
11. A container assembly according to claim 9 or 10 wherein the container
30 comprises polyethylene.
12. A container assembly according to any one of claims 7 to 11 comprising a plurality oak staves disposed in the interior of the container in contact with the liquid.

13. A container assembly according to any one of claims 7 to 12 wherein the barrier member comprises a flexible buoyant core.

5 14. A barrier member as defined in claim 13 wherein the flexible buoyant core is overwrapped with a film of material adapted to limit oxygen transmission through the core to the surface of the liquid.

15 15. A barrier member according to claim 8 or claim 10 having a peripheral flange which comprises the peripheral edge of the film extending laterally beyond an edge of the core.

15 16. A barrier member as defined in claim 7 comprising at least one tag extending from one side of the barrier member to assist with location and removal of the barrier member.

17. A barrier member according to claim 16 wherein the at least one tag comprises a loop.

20 18. A container assembly according to claim 13 comprising a plurality of oak staves suspended in liquid stored in the container.

19. A container assembly according to claim 7 or claim 9 substantially as hereinbefore described.

25 20. A barrier member according to claim 14 ~~substantially~~ as hereinbefore described.

21. A method according to claim 1 substantially as hereinbefore described.